



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,343	08/24/2006	Yasushi Maruta	20165	8411
23389 7590 07/28/2010 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530				
EXAMINER				
BAIG, ADNAN				
ART UNIT		PAPER NUMBER		
2461				
MAIL DATE		DELIVERY MODE		
07/28/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplemental
Notice of Allowability**

Application No.

10/590,343

Examiner

ADNAN BAIG

Applicant(s)

MARUTA ET AL.

Art Unit

2461

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to IDS filed on June 18, 2010.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|--|

/ADNAN BAIG/
Examiner, Art Unit 2461

SUPPLEMENTAL ACTION

This action is a supplemental notice of allowance to address IDS submitted on 18 June 2010. The IDS of 18 June 2010 were submitted after the mailing of the notice of allowability and are in compliance with 37 C.F.R. § 1.97(d).

Allowable Subject Matter

1. Claims 1-12 are allowed
2. The following is an examiners statement for reasons of allowance:

Regarding Claim 1, the prior art fails to teach the steps of a channel estimation value correction circuit which corrects the channel estimation value from said channel estimation circuit on the basis of a reception power fluctuation due to uplink transmission power control which is caused by a timing offset between the individual channel of the user and the shared channel;

a shared channel demodulation circuit which demodulates a signal corresponding to the shared channel of the user which is obtained by performing despreading operation for the radio reception output on the basis of the channel estimation value corrected by said channel estimation value correction circuit.

Regarding Claim 7, the prior art fails to teach the steps of correcting the channel estimation value calculated on the basis of a reception power fluctuation due to uplink

transmission power control which is caused by a timing offset between the individual channel of the user and the shared channel;

Demodulating a signal corresponding to the shared channel of the user which is obtained by performing despreading operation for the radio reception output on the basis of the channel estimation value corrected in the channel estimation value correction step.

3. In (US 2003/0058823), Nishimura discloses a CDMA receiver for performing channel estimation of an individual channel received using pilot bits obtained by despreading of the pilot bits with the known data for an uplink communication. The individual channel consists of a pilot portion and a data portion. However the method does not disclose the teaching of a channel estimation value correction circuit which corrects the channel estimation value from said channel estimation circuit on the basis of a reception power fluctuation due to uplink transmission power control which is caused by a timing offset between the individual channel of the user and the shared channel;

a shared channel demodulation circuit which demodulates a signal corresponding to the shared channel of the user which is obtained by performing despreading operation for the radio reception output on the basis of the channel estimation value corrected by said channel estimation value correction circuit.

4. In (US 2004/0203397), Yoon discloses a CDMA receiver which generates accurate estimates of a received signal forward link power control where a shared channel and an Individual channel are multiplexed on a forward and reverse link between a Base Station and Mobile Station. However the method does not disclose the teaching of a channel estimation value correction circuit which corrects the channel estimation value from said channel estimation circuit on the basis of a reception power fluctuation due to uplink transmission power control which is caused by a timing offset between the individual channel of the user and the shared channel;

a shared channel demodulation circuit which demodulates a signal corresponding to the shared channel of the user which is obtained by performing despreading operation for the radio reception output on the basis of the channel estimation value corrected by said channel estimation value correction circuit.

5. In (USP 6,434,366), Harrison discloses a receiver for estimating adaptive array weights for a pilot channel in relation to a traffic channel which are delayed for synchronizing a slot in which they were requested with a slot in which they were used by a transmitter. A synthesized pilot is generated and demodulated in the receiver. However the method does not disclose the synthesized pilot generated based on the calculated weights due to uplink transmission power control which is caused by a timing offset between an individual channel and shared channel and therefore does not disclose a channel estimation value correction circuit which corrects the channel estimation value from said channel estimation circuit on the basis of a reception power

fluctuation due to uplink transmission power control which is caused by a timing offset between the individual channel of the user and the shared channel;

a shared channel demodulation circuit which demodulates a signal corresponding to the shared channel of the user which is obtained by performing despreading operation for the radio reception output on the basis of the channel estimation value corrected by said channel estimation value correction circuit.

6. The dependant claims 2-6 and 8-12, being further limiting, definite and enabled by the specification, are also allowable. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADNAN BAIG whose telephone number is (571) 270-7511. The examiner can normally be reached on Mon-Fri 7:30m-5:00pm eastern Every other Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADNAN BAIG/
Examiner, Art Unit 2461
/Huy D Vu/
Supervisory Patent Examiner, Art Unit 2461